APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,206	11/03/2003	Barton J. Milburn	FORE-105	4180

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EXAMINER
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ART.UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
07/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 03 November 2003.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-9* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-9* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *11/03/07* is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some *   c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *None*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

Information Disclosure Statement

No information disclosure statement submitted with this application.

Abstract Objections

The Abstract of the disclosure is objected to because the abstract just states the

statements of claim preambles. It should be narrative of the invention.

Appropriate action is required.

Drawing Objections

Figure: 1, and Figure: 2 Drawings are hand- drown.

The informal drawings are not of sufficient quality to permit examination.

Accordingly, replacement drawing sheets in compliance with 37 CFR 1.121(d) are

required in reply to this Office action. The replacement sheet(s) should be labeled

"Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct

any portion of the drawing figures. If the changes are not accepted by the examiner,

then the applicant will be notified and informed of any required corrective action in the

next Office action.

Applicant is given a TWO MONTH time period to submit new drawings in

compliance with 37 CFR 1.81. Extensions of time may be obtained under the provisions

of 37 CFR 1.136(a). Failure to timely submit replacement drawing sheets will result in

ABANDONMENT of the application.

Specification Objection

The disclosure is objected to because of the following informality:

Terms "PVx" and "SPVx" should be spelled out. All other term such as "UNI", etc. also

needs to be spelled out.

For the prosecution of this application, examiner has considered these terms as

follows: PVx = Permanent Virtual Connection, SPVx = Switched Permanent Virtual

Connection, SVx = Switched Virtual Connection, UNI = User Network Interface.

Examiner has prosecuted this application with the assumption of the

Specifications as mentioned above.

Claim Objections

Claims 1, and 5 are objected to because of the following informality:

Regarding claims 1, and 5, PVx should be spelled out.

Claims 8, and 9 are objected to because of the following informality:

Regarding claims 8, and 9, SVx should be spelled out.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed
> publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of
> application for patent in the United States.

Claims **1 – 5, 8 and 9 are** rejected under 35 U.S.C. 102(e) as being anticipated

by **Hullet et al. (US 5689499).**

Consider **claim: 1**, Hullet et al. discloses a switch (Fig: 6 Switch) for

telecommunications network comprising: at least one fabric for switching PVx

connections (As shown in Fig: 6 plurality of inputs coming to VP1 - VP 4, are connecting

input ports to the output ports through fabric or wires); at least one input mechanism for

receiving PVx connections from the network (As shown in Fig: 6 @ VC1-VC8, plurality

of inputs coming to VP Switch Input Stage); a plurality of output mechanisms for

sending PVx connections to the network (As shown in Fig: 6 @ VC3, VC4 VC7-VC12 of

Output stage VP connects to the output), with at least one of the output mechanisms

non-modifiable (As shown in fig: 6, Combined switch VP2 and VP4's Virtual Circuits-

VCs remains intact or unchanged, col: 7, lines: 52-53); and a controller which modifies

parameters for the connections of the fabric (fig: 7 @ 56, The VP rate server works as a

controller and controls the writing in and reading out of cells in the output buffers for

further connections, col: 8, lines: 30-31), the input mechanism, and the non-modifiable

output mechanism by destroying them and then recreating the PVx connections of the

non-modifiable output mechanism (As shown in fig: 6, VP1 & VP3 are terminated at VC

switch 38 where the VCs they are carrying are terminated, cross-connected or relabeled

for reuse or recreation, col: 7, lines: 54-56) while the input mechanism, output

mechanism, fabric and connections are active and operating (Use of Buffer overflow

while switching is in operation, in the VC switch 44 is controlled by the action of

Connection Admission Control exercised by network management. Connection

Admission Control limits the number of connections handled and keeps the traffic flow

as per the rates negotiated at connection at set-up to keep the operation continued, col: 8, lines: 23-28).

Consider **claim: 2**, Hullet et al. discloses the switch of claim: 1, wherein cells of a connection of the non-modifiable output mechanism that is modified are discarded after the connection is destroyed and until the connection is recreated (As shown in fig: 6, VP1 & VP3 are terminated at VC switch 38 where the VCs they are carrying are terminated, cross-connected or relabeled for reuse or recreation, col: 7, lines: 54-56).

Consider **claim: 3**, Hullet et al. discloses the switch of claim: 2, wherein the input mechanism is an input netmod (Fig: 7 @ 42, input stage VP switch receives cells or packets from network, where netmod is a line interface port or Network Interface Module).

Consider **claim: 4**, Hullet et al. discloses the switch of claim: 3, wherein the output mechanism is an output netmod (Fig: 7 @ 46, output stage where plurality of output ports connected to network, where netmod is a line interface port or Network Interface Module).

Consider **claim: 5**, Hullet et al. discloses a method for handling connections in a telecommunications network (Fig: 6, switch is a connection between two networks) comprising the steps of: sending a modify signal for modifying parameters (As shown in

Fig: 8, AWC 68 reads the arriving cells, and sends to Schedule read Controller 70 for the necessary changes) regarding connections in the network to a switch having at least one fabric for switching PVx connections (As shown in fig: 6, VP2 and VP4 are switched by VP switch 36), at least one input mechanism for receiving PVx connections from the network (As shown in Fig: 6 @ VC1-VC8, plurality of inputs coming to VP Switch Input Stage), and a plurality of output mechanisms for sending PVx connections to the network (As shown in Fig: 6 @ VC3, VC4 VC7-VC12 of Output stage VP connects to the output of the switch to other network), with at least one of the output mechanisms non-modifiable (As shown in fig: 6, Combined switch VP2 and VP4's Virtual Circuits-VCs remains intact or unchanged, col: 7, lines: 52-53); destroying the connections of the non-modifiable output mechanism (As shown in fig: 6, Combined switch VP2 and VP4's Virtual Circuits- VCs remains intact or unchanged, col: 7, lines: 52-53, and VC 1, 2, 5, & 6 are terminated with their VPs, for re-labeling or re-use, col: 7, lines: 54-55); and recreating the connections of the non-modifiable output mechanism subject to the modify parameters (As shown in fig: 6, VP1 & VP3 are terminated at VC switch 38 where the VCs they are carrying are terminated, cross-connected or relabeled for reuse or recreation, col: 7, lines: 54-56).

Consider **claim: 8,** Hullet et al. discloses a switch (Fig: 6 Switch) for a telecommunications network (Fig: 6, switch is a connection between two networks) comprising: at least one fabric for switching SVx connections (As shown in Fig: 6

plurality of inputs coming to VP1 - VP 4, are connecting input ports to the output ports through fabric or wires); at least one input mechanism for receiving SVx connections from the network (As shown in Fig: 6 @ VC1-VC8, plurality of inputs coming to VP Switch Input Stage); a plurality of output mechanisms for sending SVx connections to the network (As shown in Fig: 6 @ VC3, VC4 VC7-VC12 of Output stage VP connects to the output), with at least one of the output mechanisms non-modifiable (As shown in fig: 6, Combined switch VP2 and VP4's Virtual Circuits- VCs remains intact or unchanged, col: 7, lines: 52-53); and a controller which modifies parameters for the connections of the fabric (fig: 7 @ 56, The VP rate server works as a controller and controls the writing in and reading out of cells in the output buffers for further connections, col: 8, lines: 30-31), the input mechanism, and the non-modifiable output mechanism by destroying them and then recreating the SVx connections of the non-modifiable output mechanism (As shown in fig: 6, VP1 & VP3 are terminated at VC switch 38 where the VCs they are carrying are terminated, cross-connected or relabeled for reuse or recreation, col: 7, lines: 54-56) while the input mechanism, output mechanism, fabric and connections are active and operating (Use of Buffer overflow while switching is in operation, in the VC switch 44 is controlled by the action of Connection Admission Control exercised by network management. Connection Admission Control limits the number of connections handled and keeps the traffic flow as per the rates negotiated at connection at set-up to keep the operation continued, col: 8, lines: 23-28).

Consider **claim: 9**, Hullet et al. discloses a method for handling connections in a telecommunications network (Fig: 6, switch is a connection between two networks) comprising the steps of: sending a modify signal for modifying parameters (As shown in Fig: 8, AWC 68 reads the arriving cells, and sends to Schedule read Controller 70 for the necessary changes) regarding connections in the network to a switch having at least one fabric for switching SVx connections (As shown in fig: 6, VP2 and VP4 are switched by VP switch 36), at least one input mechanism for receiving SVx connections from the network (As shown in Fig: 6 @ VC1-VC8, plurality of inputs coming to VP Switch Input Stage), and a plurality of output mechanisms for sending SVx connections to the network (As shown in Fig: 6 @ VC3, VC4 VC7-VC12 of Output stage VP connects to the output of the switch to other network), with at least one of the output mechanisms non-modifiable (As shown in fig: 6, Combined switch VP2 and VP4's Virtual Circuits-VCs remains intact or unchanged, col: 7, lines: 52-53); destroying the connections of the non-modifiable output mechanism (As shown in fig: 6, Combined switch VP2 and VP4's Virtual Circuits- VCs remains intact or unchanged, col: 7, lines: 52-53, and VC 1, 2, 5, & 6 are terminated with their VPs, for re-labeling or re-use, col: 7, lines: 54-55); and recreating the connections of the non-modifiable output mechanism subject to the modify parameters (As shown in fig: 6, VP1 & VP3 are terminated at VC switch 38 where the VCs they are carrying are terminated, cross-connected or relabeled for reuse or recreation, col: 7, lines: 54-56).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
such that the subject matter as a whole would have been obvious at the time the invention was made to a
person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived
by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459
(1966), that are applied for establishing a background for determining obviousness
under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness
or nonobviousness.

This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the

various claims was commonly owned at the time any inventions covered therein were

made absent any evidence to the contrary. Applicant is advised of the obligation under

37 CFR 1.56 to point out the inventor and invention dates of each claim that was not

commonly owned at the time a later invention was made in order for the Examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

        Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Hullet et al. (5689499) in view of **Abdelhamid et al. (US 7039007 B1).**

Consider **claim: 6**, and as applied to claim: 5, Hullet et al. discloses the claim: 5

and recreating a connection as per user demand, but fails to disclose setting up a timer

for virtual circuit connections set up within 50 milliseconds.

However in the same field of endeavor, Abdelhamid et al. discloses setting up a

timer for virtual circuit connections set up within 50 milliseconds (Fig: 5A @ 520 setup a

50 millisecond timer).

Therefore it would have been obvious to a person with ordinary skill in the art at

the time the invention was made to incorporate and provide a receiving mechanism as a

connection from input ports to output ports in the ATM switch as taught by Hullet et al.

for creating, destroying or adjusting virtual path of ATM switch as instructed by

Centralized Admission Control- CAC via bandwidth manager module as for different

QoS with the use of the timer for the virtual circuit connections as taught by Abdelhamid

et al. The motivation is to provide mapping customer desired end-to-end behavior onto

their network when they have different QoS and setting up the time period for the

selected results.

Consider **claim: 7**, and as applied to claim: 6, Hullet et al. in view of Abdelhamid

et al. discloses the claim: 6. Further taught by combination and specifically taught by

Hullet et al. where a method includes the step of the discarding cells of the connections

of the non-modifiable output mechanism after they have been destroyed and until they

are recreated (As shown in fig: 6, VP1 & VP3 are terminated at VC switch 38 where the

VCs they are carrying are terminated, cross-connected or relabeled for reuse or

recreation, col: 7, lines: 54-56).

Conclusion

The prior art made of record and not relied upon is considered pertinent to

Applicant's disclosure.

❑   Hullet et al. (U.S. Pub/Patent # US 5689499) discloses: Redundant ATM

interconnect mechanism.

❑   Graham et al. (U.S. Pub/Patent # 6097722) discloses: Bandwidth management

process and systems for an ATM network using variable virtual paths.

❑   Colby et al. (U.S. Pub/Patent # 6449647) discloses: Content- aware switching of

network packets.

❑   Davison, Michael (U.S. Pub/Patent # 6539017) discloses: Method and Apparatus

for arranging and adjusting a bundle in an ATM network.

❑   Mudigonda et al. (U.S. Pub/Patent # 7162520) discloses: Method and apparatus

for dynamic connection service category changes.

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ketan Soni whose telephone number is (571) 270-1782. The Examiner can normally be reached on Monday-Thursday from 7:30am to 6:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Vanderpuye, Kenneth can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028. If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist/customer service whose telephone number is

(571) 272-2600.

Ketan Soni

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Jun 28, 2007.

KENNETH VANDERPUYE
SUPERVISORY PATENT EXAMINER